CLAIMS

WHAT IS CLAIMED IS:

1.   A security system for communications network management having an integrated customer interface, said security system comprising:

(a)   at least one secure web server for managing secure sessions over the internet, said secure web server supporting secure socket layer for encrypted communication, said secure server also providing session management including customer identification, validation and session management to link said session with said customer;

(b)   at least one dispatcher server for communicating with said secure web server through a first firewall, and communicating with a plurality of proxy services and a plurality of system resources using an internal network, said dispatcher server providing verification of system access after customer entitlements have been verified; and

(c)   said plurality of system resources providing communications network management capabilities for said customer, each of said system resources responsive to a request to generate client data or instructions relating to said communications network.

2.   The security system for communications network management as claimed in claim 1 further comprising:

a plurality of client web browsers that enable
interactive secure communications with said secure system
and provide an integrated interface for said customer,
each of said web browsers supporting client
identification, client authentication and secure sockets
layer communications protocol, wherein said system
includes digital certificates to authenticate said secure
server to said client web browser.

3.   The security system for communications network
management as claimed in claim 1 wherein said session
management further includes web cookie generation at each
instance of client identification to link a session with
said customer through a plurality of discrete client
communications in said session to verify said customer to
said dispatcher server at each transmission in said
session.

4.   The security system for communications network
management as claimed in claim 3 wherein said cookie is
generated by a program on a separate server during an
entitlements communications, after identification and
authentication of the client.

5.   The security system for communications network
management as claimed in claim 2 wherein said client web
browser secure socket layer encrypts client
identification, authentication and said session
management cookie during each transmission.

6.   The security system for communications network management as claimed in claim 3 wherein said session

cookies provide simultaneous session management for a plurality of system resource platforms.

7.   The security system for communications network management as claimed in claim 1 wherein said secure web server communicates with said dispatcher server over an encrypted socket connection.

8.   The security system for communications network management as claimed in claim 7 wherein said system includes encryption between said secure web server and said dispatcher server.

9.   The security system for communications network management as claimed in claim 2 wherein said system includes a first encryption algorithm for transmission of all customer data between said secure web server and said client browser for transmission of all customer data between said secure web server and said dispatcher server and a second encryption algorithm.

10.   The security system for communications network management as claimed in claim 2 wherein each client request from said web browser is encrypted with a public key provided by said communications network, and each of said client requests includes an encrypted client cookie for client authentication.

11. A system having an integrated and secure customer interface for communications network management, said system including a web browser for use on a client computer, and a secure web server having a system home page, said system comprising:

(a) at least one Java applet embedded in said home page to provide interactive sessions with said communications network, said sessions including client authentication, session authentication and transaction requests for said communications network,

(b) an encryption layer to provide encryption of each client session with a public key provided by said communications network, each session also including session authentication with a client cookie generated by said system, said session cookie being encrypted with said public key during transmission of each transaction request to said secure server;

(c) at least one security firewall on either side of said secure server to prevent direct public access to said communications network.

12. The system for communications network management as claimed in claim 11, said communications network further including a plurality of application servers for receiving transaction requests from said secure server, said secure server encrypting each of said transaction requests with a public key algorithm before transmission to a selected one of said application servers.

13.   The system for communications network management as claimed in claim 12, said system further including a dispatcher server for receiving transaction requests from said secure server, and dispatching said request to said selected one of said application servers.

14.   The system for communications network management as claimed in claim 11, wherein said communications network includes a router based firewall between said secure server and said public Internet, and
    a proxy based firewall between said secure server and any one of said applications servers.

15.   The system for communications network management as claimed in claim 11, wherein one of said Java applets is a user object, said object being populated with a first set of entitlement at log on, and a second set of entitlement during a session with a selected application sever.

16.   The system for communications network management as claimed in claim 11, said communications network further including an authentication server which determines entitlement for said user object following authentication.